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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,920	10/29/1999	ATSUSHI WATANABE	392.1666/JDH	6526
21171	7590	01/25/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LU, TOM Y	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/429,920	WATANABE ET AL.	
	Examiner	Art Unit	
	Tom Y Lu	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment and written response filed on September 17, 2004 has been entered.
2. Claims 1, 2, 4, 8, 11, 14 and 15 have been amended.
3. Claims 9-10 have been cancelled.
4. Claims 1-8 and 11-15 are pending.

Response to Arguments

5. Applicant's arguments, see Remarks, pages 6-10, filed on 9/17/2004, with respect to the rejection(s) of claim(s) 1, 2, 4, 8, 14 and 15 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Jyumonji et al (U.S. Patent No. 5,987,591) and Wörn et al (U.S. Patent No. 6,362,813 B1).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1-8 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Referring to Claim 1, the phrase "a unit for fetching image data from *a camera of an image of a workpiece* to be worked on by the robot" is obscure and redundant; the examiner suggests "a unit for fetching an image of a workpiece to be worked on by the robot from a camera".

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- b. Claim 2 is rejected for the same reason given in Claim 1.
- c. Claim 3 is rejected for being dependent upon Claim 2.
- d. Claim 4 is rejected for the same reason given in Claim 1.
- e. Claims 5-7, 13 are rejected for being dependent upon Claim 4.
- f. Claim 8 is rejected for the same reason in Claim 1.
- g. Claims 11-12 are rejected for being dependent upon Claim 2.
- h. Claim 14 is rejected for the same reason given in Claim 1.
- i. Claim 15 is rejected for the same reason given in Claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 7-8 and 11 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Jyumonji et al (U.S. Patent No. 5,987,591).

- a. Referring to Claim 1, Jyumonji discloses a unit for fetching image data from a camera of an image of a workpiece to be worked on by the robot (column 7, lines 52-55); a memory unit that stores image data from the camera or intermediate image data obtained in stage of image processing (column 7, line 56); and a unit for converting image data from the camera, the image data from the camera stored in the memory unit or intermediate image data into a gray scale or a color scale

(camera interface 203, column 6, line 34, is the claimed “a unit for converting image data from the camera”, column 6, line 38, the image is converted into a gray scale), wherein: a portable teaching pendant is connected to said robot controller through a cable (column 12, line 25); said teaching pendant (teaching control panel TP, column 12, line 28) comprises a display unit (a display DP) and a unit used for manipulation for image processing and display of the converted image (operating keys K1, K2, and K3 at column 12, lines 53 are the claimed “unit used for manipulation for image processing”, and the converted image is displayed, column 12, lines 45- 46); and said display unit displays an image an indication for manipulation of image processing simultaneously, or allows a user to select either a switching mode or superposition mode (the display unit displays an image an indication for manipulation of image processing simultaneously as shown in figure 11, where the position is indicated in the display, column 12, lines 56-65, and the image is an image of the workpiece).

- b. With regard to Claim 2, the only difference between Claim 1 and Claim 2 is Claim 2 calls for additional limitation of “wherein the robot is designed independently of the robot controller”, the robot in Jyumonji is independent of the robot controller as seen in figure 11.
- c. Referring to Claim 3, Jyumonji discloses a unit for displaying and superposing geometric graphics on the image displayed on the display unit in accordance with the operation procedure of image processing and specifying an image processing with respect to the image (see figure 11, and column 12, lines 52-54, the jog-

movement target position indication is the claimed geometric graphics superposed on the image of workpiece W, and as the cursor key K3 moves, the image direction changes, which is considered as an image processing).

- d. With regard to Claim 4, the only difference between Claim 1 and Claim 4 is Claim 4 calls for additional limitation of "said teaching pendant comprises a unit for generating or editing a robot program, a unit for operating the robot, and a display unit, and can display on the display unit the converted image, and comprises a unit used for manipulation for image processing; and said display unit displays, indication for generating or editing of the robot a program and indication for manipulation of image processing, together with an image simultaneously, or allows a user to select either a switching mode or a superposition mode". Jyumonji teaches a unit for generating or editing a robot program, a unit for operating the robot, and a display unit, and can display on the display unit the converted image, and comprises a unit used for manipulation for image processing (column 12, lines 52-65, the unit of K1, K2 and K3 is the claimed unit for operating the robot, and a display DP can display the converted image in gray scale, and cursor key K3 is used for image position designation processing. Note Keys K1 and K2 are used to edit a robot program by jog-feeding in XYZ direction, column 21, line 57, and the designation position X and the approach arrow as shown in figure 11 are indications of the editing of the robot program and indication for manipulation of image processing, together with an image of workpiece W).

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- e. With regard to Claim 5, see explanation in Claim 3.
- f. Referring to Claim 7, Jyumonji discloses a unit for incorporating an instruction to process an image into a program of robot (column 12, line 43-45, the built-in image processor).
- g. With regard to Claim 8, see explanation in Claim 1.
- h. With regard to Claim 11, see explanation in Claim 3.
- i. With regard to Claim 15, the only unaddressed limitation is "wherein said display unit displays a video image from camera that is continuously updated", the CCD camera in Jyumonji will continuously update the video image in the display DP.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jyumonji. The arguments in paragraph 7 above as to the applicability of Jyumonji are incorporated herein.

- a. Referring to Claim 6, Jyumonji does not teach the teaching control panel is a touch panel. The examiner takes official notice that teaching control panel can be modified to operate through a touch panel because the teaching control panel in Jyumonji is operated through key buttons on the right side, and a touch panel

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merely replaces the key buttons with virtual software buttons displayed on the display screen, functionality of the keys K1, K2 and K3 does not change.

b. With regard to Claim 12, see explanation in Claim 6.

c. With regard to Claim 13, see explanation in Claim 6.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jyumonji in view of Wörn et al (U.S. Patent No. 6,362,813 B1). The arguments in paragraph 7 above as to the applicability of Jyumonji are incorporated herein.

With regard to Claim 14, the only unaddressed limitation is “a display unit can display an image processing manipulation menu”. Jyumonji does not explicitly teach the display DP on the teaching control panel TP can display an image processing manipulation menu. Wörn teaches a programming device as shown in figure 3, which contains a VGA display screen and is capable of displaying the display screen of a computer, which controls a manipulator robot 2 as shown in figure 1. At the time the invention was made, it would be reasonable for a person of ordinary skilled in the art to assume that the computer controls the robot contains an image processing manipulation menu, which in Wörn will be displayed on the programming device. And a person of ordinary skilled in the art would be motivated to incorporated such functionality into Jyumonji’s teaching control panel because Wörn teaches it is desirable to have more extensive display possibilities on a portable control panel, column 1, line 60.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y Lu whose telephone number is (703) 306-4057. The examiner can normally be reached on 8:30AM-5PM.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Anderson et al, U.S. Patent No. 6,148,100, see figure 1.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Y. Lu



JOSEPH C. LU
PATENT EXAMINER